

PLATTSBURGH AIR FORCE BASE,
BASE ENGINEER COVERED STORAGE BUILDING
(Plattsburgh Air Force Base, Building No. 3400)
Perimeter Road
Plattsburgh
Clinton County
New York

HAER No. NY-326-AH

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD

National Park Service
Northeast Region
Philadelphia Support Office
U.S. Custom House
200 Chestnut Street
Philadelphia, Pennsylvania 19106

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Location: Perimeter Road, Plattsburgh, Clinton County, New York.

UTM: 18.620810.4946000
Quad: Plattsburgh, NY-VT, 1:24,000 (1966)

Date of Construction: 1961

Architect/Engineer: Unknown

Present Owner: United States Air Force

Present Use: Vacant

Significance: Building No. 3400 was a liquid oxygen (LO_x) generating facility that supported a squadron of first-generation intercontinental ballistic missiles (ICBMs) located around Plattsburgh Air Force Base (AFB) from 1961 to 1965. The 556th Strategic Missile Squadron was equipped with Atlas F missiles, the only ICBMs ever based east of the Mississippi River. First deployed in 1959, Atlas missiles, which required LO_x for their propulsion system, provided the first deterrent against Soviet ICBM attack. Atlas missile sites, including those around Plattsburgh AFB were on full alert during the Cuban Missile Crisis of 1962. The Atlas ICBM had a short operational life and was obsolete by the mid-1960s. At that time the Atlas sites were decommissioned and the Atlas mission was withdrawn from Plattsburgh AFB.

Project Information: Building No. 3400 at Plattsburgh AFB is being documented in accordance with HAER standards to mitigate for the potential adverse effects of transferring deed of title to the property from federal ownership. The property transfer is a result of the disposal and reuse of Plattsburgh AFB, pursuant to the Defense Base Closure and Realignment Act of 1993. The mitigation is a stipulation of a Programmatic Agreement (PA) among the U.S. Air Force, the New York State Historic Preservation Officer, and the Advisory Council on Historic Preservation (October 2000).

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Summary Description of Base Engineer Covered Storage Building (Building No. 3400)

Layout

Building No. 3400 is a steel-framed building with a side-gabled roof. It is roughly rectangular in plan and clad in corrugated metal siding. The main section of the building measures approximately 49 feet 0 inches by 81 feet 0 inches. The east façade has a shorter one-story lean-to across its entire span that originally included a restroom and electrical equipment. The west façade also has a one-story, concrete block lean-to that originally housed a pump room, and is partially obscured by an electrical sub-station to its west. The primary, north façade has two service bays with roll-up doors. The south façade has four vehicle service bays that are covered with panels. This building has several personnel entrances, few windows, and several louvered ventilation panels.

The interior of the main section is an open space with a smooth concrete floor. Two areas of rough concrete correspond to the two bay openings toward the left (west) side of the rear (south) façade. Steel framing throughout consists of vertical posts rising from the floor to the rafters at the gabled ends, with no tie beams. A heavy steel beam runs the length of the roof/wall junction between gables. There are four purlins under either side of the roof, but none supporting the ridge. The west lean-to has been used at various times for office and restroom space. The east lean-to is not accessible from inside the main building. The east lean-to was used as a restroom and to store electrical equipment. This building was used to store all kinds of equipment, parts and components.

Alterations/Additions

Modifications to this facility between 1966 and 1989 include:

A 12-foot extension of the west concrete block lean-to,

Addition of a right-side door and covering of the original left-side door with a removable pane,

Covering of a louvered vent opening with steel siding on the north side of the building,

Covering of the two left-bay top louvers, and removal of steel rods and pipes from the concrete apron on the south side of the building, and

Removal of all of the LO_x production equipment in 1966 occurred when the facility was converted to a storage facility.

Function

Constructed in 1961, Building No. 3400 was originally designed as an Oxygen Generation Plant to support the Atlas missile silos arrayed around Plattsburgh AFB. The function of the facility was to generate LO_x, a major component of the Atlas missile's propulsion systems. LO_x storage tanks inside the Atlas missile silos needed to be supplemented with new shipments of LO_x on a regular basis. Operating in conjunction with the LO_x Cleaning Plant in Building No. 2612, the Oxygen Generation Plant produced the necessary LO_x to

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fulfill the Atlas program's needs. LO_x production equipment was located inside Building No. 3400 while LO_x tanks for temporary storage were mounted on a large concrete slab behind the building. Tanker trucks pulled into this rear area, took on LO_x, and transported the compressed gas to the Atlas silos.

After 1966, Building No. 3400 provided covered storage for equipment and supplies needed for installation operations and maintenance that did not require regular warehouse storage yet needed to be protected from the weather (e.g., roofing materials, plumbing and electrical supplies).

Significance

The Atlas missile was the first U.S. ICBM to achieve operational status. With a goal of delivering a nuclear warhead to targets 5,000 miles from the launching point, the Convair division of General Dynamics developed the Atlas in 1946; however, an Air Force contract for the actual development of the missile was not awarded until January 1955. Early Atlas variants (models A-D) reached a limited operational capability by the late 1950s, but the last of the Atlas missiles (the E and F models) were not operational until 1961. Titan and Minuteman missiles replaced these in 1965. After withdrawal from the inventory, the Atlas missiles were made available for use as space launch vehicles.

The Strategic Air Command established a total of six Atlas F squadrons, which became fully operational between September and December 1962. The last of these to become operational was the 556th Strategic Missile Squadron at Plattsburgh AFB; at the time, it was the only ICBM base east of the Mississippi River.

Between 1961 and 1965, the production and storage of LO_x was critical to the Atlas mission at Plattsburgh AFB. Twelve Atlas silos were arrayed within 50 miles of the installation, including locations at Champlain, Willsboro, Lewis, Ausable Forks, Riverview, Redford, Dannemora, Brainardsville, Ellenburg, and Mooers, New York, and Alburg and Swanton Vermont (see map—*Missile sites Plattsburgh AFB, New York*). The Plattsburgh AFB Atlas missile mission and the Atlas missile sites were deactivated in 1965.

Sources

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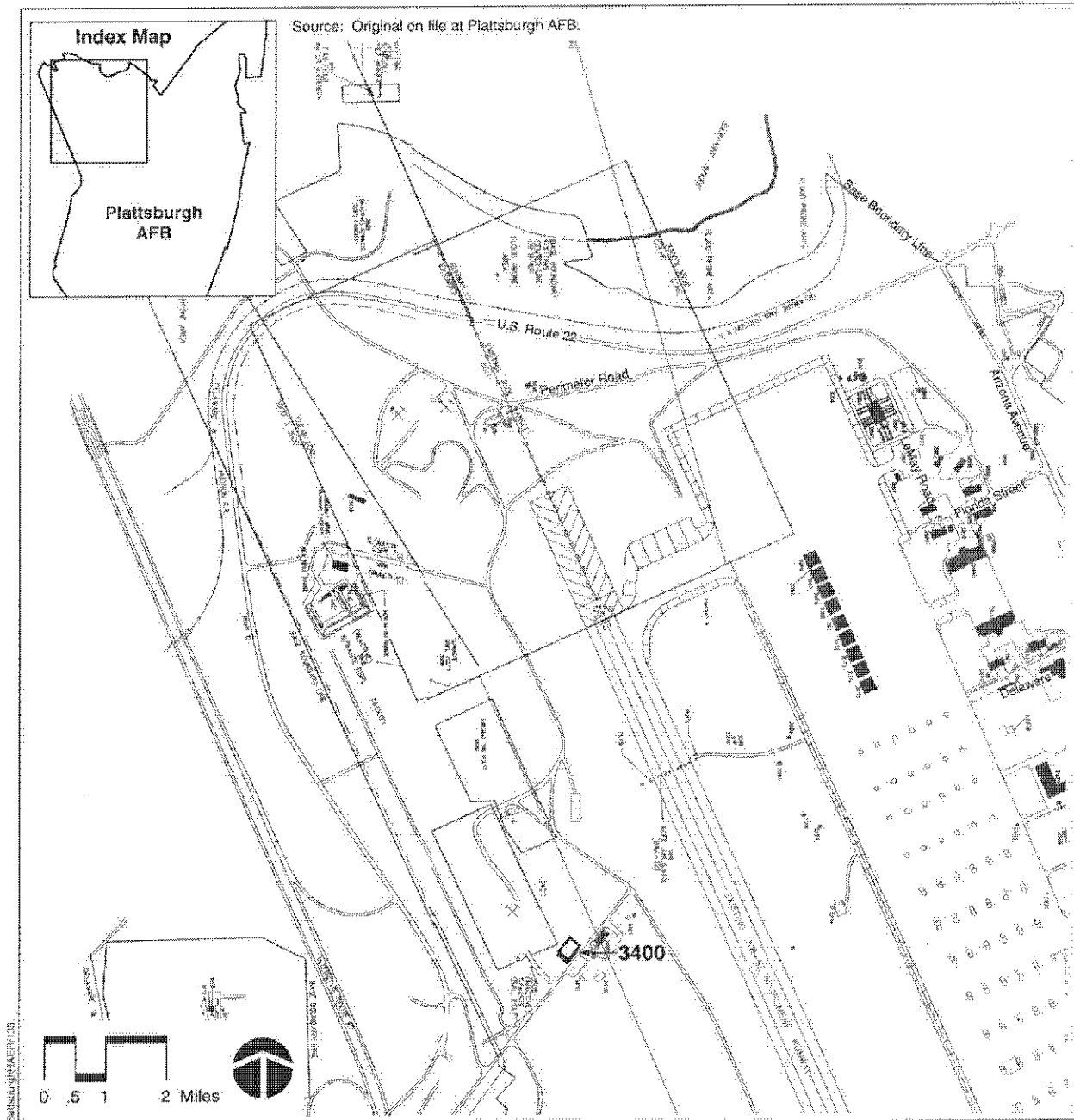
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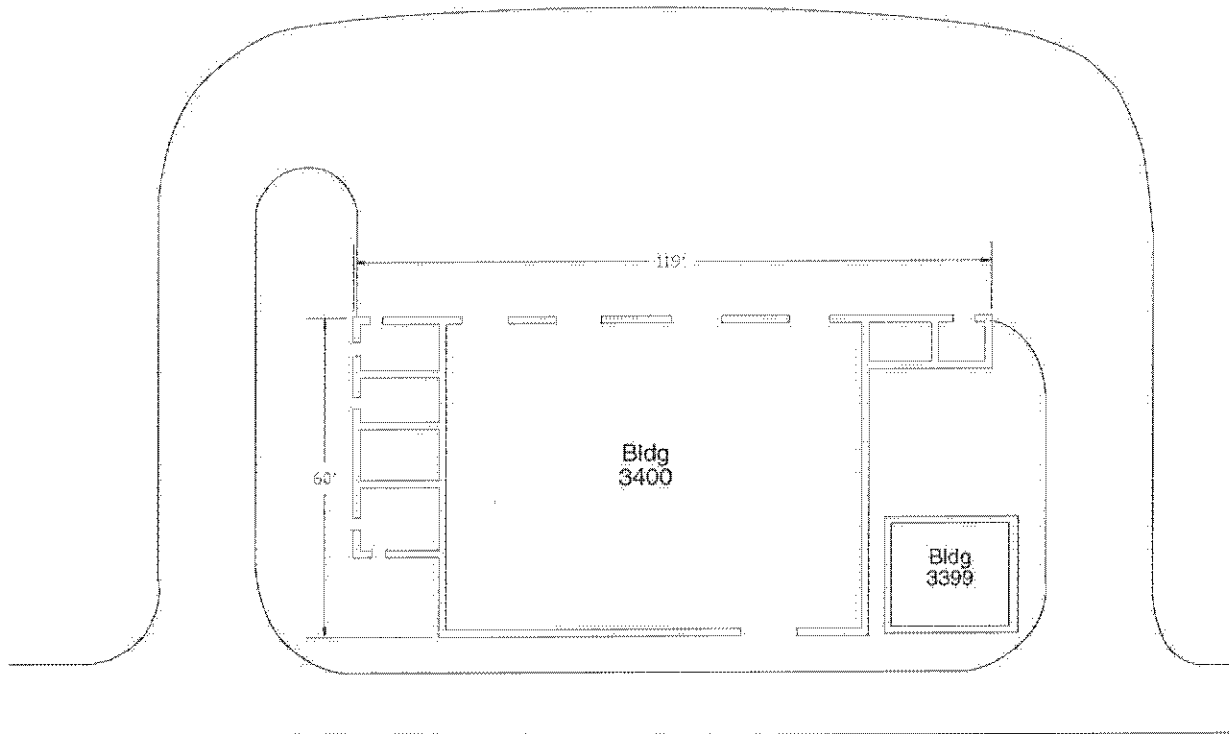
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Location Map for Base Engineer Covered Storage Building, Building No. 3400
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Sketch not to Scale

SKETCH PLAN—BASE ENGINEER COVERED STORAGE BUILDING
(Plattsburgh Air Force Base, Building No. 3400)
(Source: Plattsburgh AFB CAD File, Prepared by the United States Air Force, ca 2000)
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